Guidance

workshop

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CARCINOGENICITY OF CIGARETTE SMOKE : BRIDGING THE GAP BETWEEN COMPLEX MIXTURES AND INDIVIDUAL COMPONENTS.

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While it is generally accepted that cigarette smoking increases the risk of lung and other cancers in humans, there is not widespread agreement on what specific chemicals in the volatile and particulate fractions might be responsible for these effects. Since the components of cigarette smoke have continued to change over the years, especially with regard to those derived from tar, it is important to utilize state-of-the-art molecular and cellular techniques to analyze potential mechanisms of carcinogenicity of cigarette smoke. It is also important to understand how to extrapolate data obtained from isolated components to complex mixtures. The overall purpose of this workshop will be to bring together scientists with established track records performing cigarette smoke inhalation studies with those focusing on isolated components and mechanisms of carcinogenicity. Early cellular and molecular markers and dosimeters of tissue injury need to be established and validated. The effects of various mainstream and sidestream smoke components, as well as specific chemicals and oxidants present in smoke, on DNA and cell signaling pathways will be the focus of this workshop.